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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/858,146	05/15/2001	Lawrence Wilcock	B-4182 618805-0	2516

7590 07/18/2005

HEWLETT-PACKARD COMPANY
INTELLECTUAL PROPERTY ADMINISTRATION
P.O. BOX 272400, 3404 E. HARMONY RD.
FORT COLLINS, CO 80527-2400

EXAMINER

SHARMA, SUJATHA R

ART UNIT	PAPER NUMBER
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2684

DATE MAILED: 07/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/858,146	WILCOCK ET AL.	
	Examiner	Art Unit	
	Sujatha Sharma	2684	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>9/16/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1,3-5,8-11,14,16-18 are rejected under 35 U.S.C. 102(b) as being unpatentable over Cisneros [US 5,774,829] in view of Mannings [US 6,650,284].

Regarding claim 1,14 Cisneros discloses a positioning system, which uses uncoordinated beacon signals in conjunction with absolute positioning system. Cisneros further discloses a method of obtaining location data about a mobile entity for provision to a location-sensitive application, the method comprising:

- periodically obtaining location updates indicative of the current location of the mobile entity from a first source of location data; see col. 7, line 65 – col. 8, line 11
- location updates from said first source in dependence on the provision of location data indicative of the current location of the mobile entity from at least one other source of location data that operates independently of said first source and the location updates provided thereby; see col. 25, line 53 – col. 26, line 12

However, Cisneros does not disclose a method of adaptively varying the update interval between the location updates from said first source in dependence on the provision of location data indicative of the current location of the mobile entity from at least one other source of

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location data that operates independently of said first source and the location updates provided thereby.

Mannings, in the same field of endeavor, teaches a method of adaptively varying the frequency or interval of location updates based on the system conditions like size and nature of the overlay area and/or speed of the vehicle. See col. 15, lines 25-41.

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to provide the teachings of Mannings to Cisneros in order to avoid unnecessary updates and thus improve the transmission capacity.

Regarding claims 3-5 and 16-18, Cisneros as treated in claims 1,14 discloses all the limitations as claimed. However, he does disclose a method wherein the update interval increases with the speed of the moving object and therefore update interval is dependent on the accuracy of the location data received from at least one other source of location data.

Mannings, in the same field of endeavor, teaches a method wherein the update interval increases with the speed of the moving object and therefore update interval is dependent on the accuracy of the location data received from at least one other source of location data. See col. 15, lines 25-40.

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to provide the teachings of Mannings to Cisneros in order to provide a more refined position of the mobile station.

Regarding claims 8,9, Mannings further discloses the update interval to be dependent on the current environment of the mobile entity. See col. 15, lines 25-40.

Regarding claim 10, Mannings further discloses a method wherein the environment information is derived from a map having regard to the current location of the mobile entity. See col. 2, lines 28-35, col. 12, lines 20-35 and 65-67.

Regarding claim 11, Mannings further discloses a method where the update interval is dependent on the progress of the location sensitive application. See col. 2, lines 28-35, col. 12, lines 20-67.

2. Claims 2,6,7,12,13,15,19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cisneros [US 5,774,829] and Mannings [US 6,650,284] in view of Taft [GB 2 339 356 A].

Regarding claim 2,15 Cisneros as treated in claims 1, 14 disclose all the limitations as claimed. However he does not disclose a method where the one other source of location data is from short-range beacons.

Taft, in the same field of endeavor, teaches a method wherein the one other source of data being short-range location beacons. See Fig. 1; page 1, paragraph 4 ; page 2, paragraph 5 ; page 4, paragraphs 1,2,4,5.

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to provide the teachings of Taft to Cisneros in order to provide a more refined position of the mobile station.

Regarding claims 6,19, Taft further discloses the update intervals to be a function of the motion of the mobile object. See page 4, paragraphs 1,2,4,5.

Regarding claim 7, Taft further discloses a method wherein the frequency of updates increases with velocity of the mobile object. See page 4, paragraphs 1,2,4,5.

Regarding claim 12, Taft further discloses a method wherein the frequency of updates increases as the mobile object moves closer to the target location. See page 4, paragraphs 1,2,4,5.

Regarding claim 13, Taft further discloses the update interval to be dependent on motion of the mobile object and progress of the location sensitive application. See page 4, paragraphs 1,2,4,5.

Response to Arguments

3. Applicant's arguments with respect to claims 1-19 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Sahinoglu [US 6,853,848]

Method and system for classifying mobile terminals

Rayne [US 2002/0120394]

Fleet position monitoring system


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Raith [US 6,856,807] Method to control the update frequency of a positioning device by a mobile terminal

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sujatha Sharma whose telephone number is 571-272-7886. The examiner can normally be reached on Mon-Fri 7.30am - 4.00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 571-272-7882. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Sujatha Sharma
June 28, 2005

EDAN ORGAD
PATENT EXAMINER/TELECOMM.

10 7/6/05